

## ABSTRACT

A hierarchical protection switching framework uses detectors and protectors. A  
5 protector registers with a detector to receive notifications. A detector identifies a  
condition and the interested protector, and notifies the interested protector. The protector  
in response to the notification, typically either performs protection switching or notifies  
another protector of the condition. This protection switching is an extensible operation,  
and typically may include, but is not limited to switching traffic to a backup facility from  
10 a facility corresponding to the condition and switching traffic to a backup component  
from a component corresponding to the condition. The decision of a protector whether to  
notify another protector of the condition can be made based on different factors, such as,  
but not limited to a failure of the protection switching by the protector, a database lookup  
operation to identify whether notification of another particular condition has been  
15 received or not received, etc.

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